

IN THE CLAIMS:

1. (Currently Amended) An improved shaped charge comprising:
 - (a) a charge case,
 - (b) a main load within the charge case; and
 - (c) a layer of a polymer/polymer mixture positioned between the main load and a liner
- 5 wherein the polymer/polymer mixture comprises a metal oxide.
2. (Original) The improved shaped charge of Claim 1 further comprises:
 - (d) a booster coupling the main load to an ignition source.
3. (Original) The improved shaped charge of Claim 1 wherein the polymer/polymer mixture undergoes a decomposition reaction to produce a fracturing pressure event.
4. (Original) The improved shaped charge of Claim 1 wherein the polymer/polymer mixture further comprises a metal.
5. (Cancelled) The improved shaped charge of Claim 1 wherein the polymer/polymer mixture further comprises a metal oxide.
6. (Cancelled) The improved shaped charge of Claim 1 wherein the polymer/polymer mixture further comprises a metal and a metal oxide.

7. (Original) The improved shaped charge of Claim 1 wherein the polymer/polymer mixture comprises an additional oxygen source.
8. (Currently Amended) The improved shaped ~~charge of Claim 6 wherein~~ charge of Claim 7 wherein the oxygen source comprises a perchlorate salt.
9. (Original) The improved shaped charge of Claim 1 wherein the polymer/polymer mixture is polytetrafluoroethylene.
10. (Original) The improved shaped charge of Claim 4 wherein the polymer/polymer mixture is polytetrafluoroethylene and aluminum.
11. (Original) The improved shaped charge of Claim 4 wherein the polymer/polymer mixture is polytetrafluoroethylene and titanium.
12. (Original) The improved shaped charge of Claim 1 wherein the polymer/polymer mixture is mixed with an ignition speed controller.
13. (Currently Amended) The improved shaped charge of ~~Claim 5 wherein~~ Claim 1 wherein the polymer/polymer mixture is polytetrafluoroethylene and a metal/metal oxide mixture.
14. (Original) The improved shaped charge of Claim 1 wherein the charge case comprises zinc.

15. (Original) The improved shaped charge of Claim 1 wherein the charge case comprises steel.
16. (Original) The improved shaped charge of Claim 1 wherein the charge case comprises a polymer and metal mixture.
17. (Currently Amended) The improved shaped charge of ~~Claim 17 wherein~~ Claim 1 wherein the charge case comprises a mixture of polytetrafluoroethylene and titanium.
18. (Original) The improved shaped charge of Claim 1 further comprises:
 - (d) a decomposition catalyst.

19. (Currently Amended) An improved shaped charge comprising:
- (a) a charge case,
 - (b) a main load within the charge case;
 - (c) a layer of a polymer/polymer mixture positioned between the main load and a liner;
- 5 and
- (d) a booster coupling the main load to an ignition source;
- wherein the polymer/polymer mixture comprises a metal oxide, further wherein the
polymer/polymer mixture undergoes a decomposition reaction to produce a fracturing
pressure event.
20. (Original) The improved shaped charge of Claim 19 wherein the polymer/polymer
mixture further comprises a metal.
21. (Cancelled) The improved shaped charge of Claim 19 wherein the polymer/polymer
mixture further comprises a metal oxide.
22. (Cancelled) The improved shaped charge of Claim 19 wherein the polymer/polymer
mixture further comprises a metal and a metal oxide
23. (Original) The improved shaped charge of Claim 19 wherein the polymer/polymer
mixture comprises an additional oxygen source.

24. (Original) The improved shaped charge of Claim 23 wherein the oxygen source comprises a perchlorate salt.
25. (Currently Amended) The improved shaped charge of Claim 19 wherein the polymer/polymer ~~mixture is~~ mixture further comprises polytetrafluoroethylene.
26. (Currently Amended) The improved shaped charge of Claim 19 wherein the polymer/polymer ~~mixture is~~ mixture further comprises polytetrafluoroethylene and aluminum.
27. (Currently Amended) The improved shaped charge of Claim 19 wherein the polymer/polymer ~~mixture is~~ mixture further comprises polytetrafluoroethylene and titanium.
28. (Original) The improved shaped charge of Claim 19 wherein the polymer/polymer mixture is mixed with an ignition speed controller.
29. (Currently Amended) The improved shaped charge of Claim 19 wherein the polymer/polymer ~~mixture is~~ mixture further comprises polytetrafluoroethylene and a metal/metal oxide mixture.
30. (Original) The improved shaped charge of Claim 19 wherein the charge case comprises a polymer and metal mixture.

31. (Original) The improved shaped charge of Claim 19 wherein the charge case comprises a mixture of polytetrafluoroethylene and titanium.

32. (Original) The improved shaped charge of Claim 19 further comprises a decomposition catalyst.

33. (Currently Amended) A method of fracturing a formation comprising the steps of:

(a) lowering an improved shaped charge into a well to a depth adjacent to the formation;

5 wherein the shaped charge has a charge case, a main load within the charge case; and a

layer of a polymer/polymer mixture positioned between the main load and a [[liner;]]

liner wherein the polymer/polymer mixture comprises a metal oxide; and,

(b) detonating the shaped charge.